

A Mother's Day Letter to the First Lady of the United States, Michelle Obama

Dear Mrs. Obama,

We are mothers from all walks of life writing to you about an urgent matter: the health threats to our children posed by extreme forms of fossil fuel extraction, in particular, the process of drilling oil and natural gas using high-volume, hydraulic fracturing, known as “fracking.”

The ongoing drilling and fracking boom has spurred the proliferation of drill rigs in backyards, schoolyards, and family farms across America. These are places where our children live, play, and learn. Even areas near daycare centers and summer camps have been targeted for drilling and fracking, a process in which explosives and high-pressure mixtures of water and chemicals are used to blast apart bedrock.

Because children cannot vote or make public policy, because children are more vulnerable than adults to toxic exposures, and because parents are charged with keeping children safe and providing for their future, we, the undersigned mothers, have joined with scientists, pediatricians, and public health officials in calling for a moratorium on fracking until the potential effects on children's health and the environment can be carefully studied.¹ Right now, demonstration of safety does not exist.

We are concerned about air pollution. Smog levels are high in communities near drilling and fracking sites.² This kind of air pollution is linked to childhood asthma, lost school days, and higher health care costs.³ It is also linked to low birth weight and preterm birth.⁴

We are concerned about drinking water. Methane contamination of family drinking water wells has occurred near gas wells in Pennsylvania. Benzene and other chemicals used during natural gas operations have been detected in groundwater near gas drilling operations in Wyoming.⁵

We are concerned about chemical spills. Although many chemicals used in drilling and fracking are considered proprietary, we know the list of ingredients includes substances linked to childhood cancers, birth defects, and hormone disruption.⁶

We are concerned about reports of reproductive problems and deaths among pets, cows, and wildlife exposed to drilling and fracking operations. We wonder what message these animals hold for pregnant women living near drill sites.⁷

We are concerned about the radioactive content of fracking wastewater and the lack of a comprehensive plan for its permanent disposal.⁸

We are concerned about noise pollution from 24/7 drilling operations, heavy machinery, and associated truck traffic. Noise pollution is associated with stress, disrupted sleep, and learning and behavioral difficulties.⁹

We are concerned about the industrialization of open space. Filling up farm fields, pastures, wilderness areas, and state parks with waste pits, pipelines, drill pads, condensers, and compressor stations transforms the landscape our children inhabit. It undermines our efforts to bring healthy food from local farms to our dinner tables. It denies families opportunities for outdoor physical activity in natural areas.

Scientists are just beginning to address questions about the impact of drilling and fracking on children's health. We support and encourage this ongoing inquiry. But we also believe that—until the answers are in, and in the face of fundamental uncertainties—benefit of the doubt belongs to our children, not to the things that threaten them.¹⁰

We are guided by these truths, which we hold to be self-evident:

- We know that water is life.
- We know that methane is explosive.
- We know that groundwater, once contaminated, cannot be cleaned up.
- We know that we cannot shop for clean air.
- We know that drilling and fracking operations require hundreds of truck trips per well and that many of these trucks haul poisonous chemicals.
- We know that accidents happen.
- We know that toxic injuries in pregnancy and early childhood have lifelong consequences.
- We know that you shouldn't break something that you can't fix.

Our appeal is simple and fundamental to our role as mothers. We do not want children drinking milk from cows grazing on chemically contaminated pastures. We do not want children breathing benzene on school playgrounds. We do not want convoys of water and gravel trucks sharing the roadways with school buses. Nor with teenagers learning to drive. Nor with kids on bicycles. We do not want children used as subjects in a reckless experiment whose long-term consequences and cumulative impacts are not yet understood.

We do want to bequeath to our children and grandchildren an unfractured, unpoisoned world.

In December 1948, the United Nations General Assembly adopted the Universal Declaration of Human Rights. An initiative of former First Lady Eleanor Roosevelt, this document stands as the most widely recognized statement of the rights to which every person is entitled. These include the right to ensure the safety and health of children and families. More recently, the United Nations has declared safe and potable drinking water a human right.

As America's current First Lady and first mother, you have been outspoken in your commitment to families, children, health, and future generations. We hope that you will now join us in our call to "hit the pause button" on drilling and fracking operations and pursue a new course. Extreme fossil fuel extraction is not the answer to our nation's energy challenges.

Our children's health and the survival of our planet depend on policymakers and citizens joining together to commit to sustainable, renewable energy. In this, we hope that you will serve as our 21st-century Eleanor. Visit our website, <http://www.mothersforsustainableenergy.com/>, and let us know what you think.

Thank you.

Warmest regards,

Angela Monti Fox, mother of *Gasland* filmmaker, Josh Fox

¹ See, for example: Medical Society of the State of New York, "2011 Position Statement 90.992, High Volume Hydraulic Fracturing in the Marcellus Shale Area," http://www.mssny.org/mssnycfm/mssnyeditor/File/2011/About/Position_Statements/2011_Position_Statements.pdf, page 52; Bassett Healthcare Network, "Resolution by the Medical Staff of the Bassett Healthcare Network Regarding Hydrofracking for Natural Gas," February 23, 2011, <http://www.bassett.org/our-network/media-room/news/2011/bassett-statements-on-hydrofracking/>; American Academy of Pediatrics, District II, New York State, "Memo of Support A10490/S7592," June 7, 2010; Physicians, Scientists & Engineers for Healthy Energy, "Public Health Considerations of the Draft Supplemental Generic Environmental Impact Statement," <http://www.psehealthyenergy.org/resources/view/198848>.

² Colorado Department of Public Health and Environment (CDPHE), *Public Health Implications of Ambient Air Exposures as Measured in Rural and Urban Oil & Gas Development Areas – an Analysis of 2008 Air Sampling Data* (Garfield County, Colorado, 2010); S. Kembell-Cook, et al., "Ozone Impacts of Natural Gas Development in the Haynesville Shale," *Environ. Sci. Technol.* 44 (2010): 9357-9363; G. Pétron, et al., "Hydrocarbon Emissions Characterization in the Colorado Front Range: A Pilot Study," *J. Geophys. Res.* 117 (2012), D04304, doi:10.1029/2011JD016360.

³ D. A. Searing and N. Rabonovitch, "Environmental Pollution and Lung Effects in Children," *Curr. Opin. Pediatr.* 23 (2011): 314-318.

⁴ E. H. van den Hooven, et al., "Air Pollution Exposure during Pregnancy, Ultrasound Measures of Fetal

Growth, and Adverse Birth Outcomes: A Prospective Cohort Study,” *Environ. Health Perspect.* 120 (2012): 150-156. H. H. Chang, et al., “Time-to-Event Analysis of Fine Particle Air Pollution and Preterm Birth: Results from North Carolina, 2001–2005,” *Am. J. Epidemiol.* 175 (2012): 91-98; M. L. Bell, et al., “The Relationship between Air Pollution and Low Birth Weight: Effects by Mother’s Age, Infant Sex, Co-Pollutants, and Pre-Term Births,” *Environ. Res. Lett.* 3 (2008), 044003, doi:10.1088/1748-9326/3/4/044003; R. Morello-Frosch, et al., “Ambient Air Pollution Exposure and Full-Term Birth Weight in California,” *Environmental Health* 9, article no. 44 (2010): <http://www.ehjournal.net/content/9/1/44>.

⁵ D. C. DiGiulio, et al., *Investigation of Ground Water Contamination near Pavillion, Wyoming, Draft*. (U.S. Environmental Protection Agency, Office of Research and Development, National Risk Management Research Laboratory, Ada, Oklahoma, December 2011), EPA 600/R-00/000, <http://www.epa.gov/region8/superfund/wy/pavillion/index.html>.

⁶ T. Colborn, et al., “Natural Gas Operations from a Public Health Perspective,” *Hum. Ecol. Risk Assess.* 17 (2011): 1039-1056; P. J. Lupo, et al., “Maternal Exposure to Ambient Levels of Benzene and Neural Tube Defects among Offspring: Texas, 1999-2004,” *Environ. Health Perspect.* 119 (2011): 397-402; K. W. Whitworth, “Childhood Lymphohematopoietic Cancer Incidence and Hazardous Air Pollutants in Southeast Texas, 1995-2004,” *Environ. Health Perspect.* 116 (2008): 1576-1580.

⁷ M. Bamberger and R. Oswald, “Impacts of Gas Drilling on Human and Animal Health,” *New Solutions* 22 (2012): 51-77.

⁸ I. Urbina, “Regulation Lax as Gas Wells’ Tainted Water Hits Rivers,” *New York Times*, Feb. 26, 2011.

⁹ R. A. Etzel and S. J. Balk, eds., “Noise,” in: *Pediatric Environmental Health*, 2nd ed. (Elk Gove Village, Illinois: American Academy of Pediatrics, 2003), 311-321; Lin Fritschi, et al., eds., *Burden of Disease from Environmental Noise: Quantification of Healthy Life Years Lost in Europe* (Copenhagen: World Health Organization, 2011), http://www.euro.who.int/_data/assets/pdf_file/0008/136466/e94888.pdf.

¹⁰ C. Tucker, “Health Concerns of ‘Fracking’ Drawing Increased Attention: EPA Conducting Studies on Health Effects,” *The Nation’s Health* 42, no. 2 (March 2012): 1, 14, <http://thenationshealth.aphapublications.org/content/42/2/1.2.full>.